

Basic Programs

1. Write a C program to perform input/output of all basic data types.
2. Write a C program to enter two numbers and find their sum.
3. Write a C program to enter two numbers and perform all arithmetic operations.
4. Write a C program to enter length and breadth of a rectangle and find its perimeter.
5. Write a C program to enter length and breadth of a rectangle and find its area.
6. Write a C program to enter radius of a circle and find its diameter, circumference and area.
7. Write a C program to enter length in centimeter and convert it into meter and kilometer.
8. Write a C program to enter temperature in Celsius and convert it into Fahrenheit.
9. Write a C program to enter temperature in Fahrenheit and convert to Celsius
10. Write a C program to convert days into years, weeks and days.
11. Write a C program to find power of any number x^y .
12. Write a C program to enter any number and calculate its square root.
13. Write a C program to enter two angles of a triangle and find the third angle.
14. Write a C program to enter base and height of a triangle and find its area.
15. Write a C program to calculate area of an equilateral triangle.
16. Write a C program to enter marks of five subjects and calculate total, average and percentage.
17. Write a C program to enter P, T, R and calculate Simple Interest.
18. Write a C program to enter P, T, R and calculate Compound Interest.

Bitwise Operators:

19. Write a C program to check Least Significant Bit (LSB) of a number is set or not.
20. Write a C program to check Most Significant Bit (MSB) of a number is set or not.
21. Write a C program to get nth bit of a number.
22. Write a C program to set nth bit of a number.
23. Write a C program to clear nth bit of a number.
24. Write a C program to toggle nth bit of a number.
25. Write a C program to get highest set bit of a number.
26. Write a C program to get lowest set bit of a number.
27. Write a C program to count trailing zeros in a binary number.
28. Write a C program to count leading zeros in a binary number.
29. Write a C program to flip bits of a binary number using bitwise operator.
30. Write a C program to count total zeros and ones in a binary number.
31. Write a C program to rotate bits of a given number.
32. Write a C program to convert decimal to binary number system using bitwise operator.
33. Write a C program to swap two numbers using bitwise operator.

34. Write a C program to check whether a number is even or odd using bitwise operator.

Conditional (ternary) operator programs:

35. Write a C program to find maximum between two numbers using conditional operator.

36. Write a C program to find maximum between three numbers using conditional operator.

37. Write a C program to check whether a number is even or odd using conditional operator.

38. Write a C program to check whether year is leap year or not using conditional operator.

39. Write a C program to check whether character is an alphabet or not using conditional operator.

If Else Programs:

40. Write a C program to find maximum between two numbers.

41. Write a C program to find maximum between three numbers.

42. Write a C program to check whether a number is negative, positive or zero.

43. Write a C program to check whether a number is divisible by 5 and 11 or not.

44. Write a C program to check whether a number is even or odd.

45. Write a C program to check whether a year is leap year or not.

46. Write a C program to check whether a character is alphabet or not.

47. Write a C program to input any alphabet and check whether it is vowel or consonant.

48. Write a C program to input any character and check whether it is alphabet, digit or special character.

49. Write a C program to check whether a character is uppercase or lowercase alphabet.

50. Write a C program to input week number and print week day.

51. Write a C program to input month number and print number of days in that month.

52. Write a C program to count total number of notes in given amount.

53. Write a C program to input angles of a triangle and check whether triangle is valid or not.

54. Write a C program to input all sides of a triangle and check whether triangle is valid or not.

55. Write a C program to check whether the triangle is equilateral, isosceles or scalene triangle.

56. Write a C program to find all roots of a quadratic equation.

57. Write a C program to calculate profit or loss.

58. Write a C program to input marks of five subjects Physics, Chemistry, Biology, Mathematics and Computer. Calculate percentage and grade according to following:

Percentage \geq 90% : Grade A

Percentage \geq 80% : Grade B

Percentage \geq 70% : Grade C

Percentage \geq 60% : Grade D

Percentage \geq 40% : Grade E

Percentage < 40% : Grade F

59. Write a C program to input basic salary of an employee and calculate its Gross salary according to following:

Basic Salary \leq 10000 : HRA = 20%, DA = 80%

Basic Salary \leq 20000 : HRA = 25%, DA = 90%

Basic Salary > 20000 : HRA = 30%, DA = 95%

60. Write a C program to input electricity unit charges and calculate total electricity bill according to the given condition:

For first 50 units Rs. 0.50/unit

For next 100 units Rs. 0.75/unit

For next 100 units Rs. 1.20/unit

For unit above 250 Rs. 1.50/unit

An additional surcharge of 20% is added to the bill

Switch Case Programs:

61. Write a C program to print day of week name using switch case.

62. Write a C program print total number of days in a month using switch case.

63. Write a C program to check whether an alphabet is vowel or consonant using switch case.

64. Write a C program to find maximum between two numbers using switch case.

65. Write a C program to check whether a number is even or odd using switch case.

66. Write a C program to check whether a number is positive, negative or zero using switch case.

67. Write a C program to find roots of a quadratic equation using switch case.

68. Write a C program to create Simple Calculator using switch case.